

At page 9, in line 4, replace "cuvette 13 and 33" with -reaction location

B6 11 and a beam guidance arrangement 33--.

IN THE CLAIMS:

Please amend claims 1 to 25 as set forth below.

1. (Amended) An apparatus for carrying out optical measurements comprising:

(a) at least one [or more, preferably two,] light [sources with the same or different, preferably different,] source having a spectral [regions] region;

(b) at least one [or more beam] light guidance [systems] arrangement for [detecting and] guiding the light [to the desired measurement] from said at least one light source along a common beam axis which intersects at least one reaction location[.];

(c) at least one [or more filter(s)] filter for [targeted] separation or combination of [the] at least one desired spectral [regions] region and for beam shaping, wherein said at least one filter intersects said common beam axis;

(d) at least one [or more diaphragm(s)] diaphragm for limiting the beam [diameters] diameter of said at least one light source and for shaping the beam [shaping], wherein said at least one diaphragm intersects said common beam axis; and

(e) [suitable sensors] at least one sensor for detecting [the] at least one signal generated by [the] a material to be measured and at least one reference [signals] signal.

2. (Amended) The apparatus as claimed in claim 1, [having a] wherein said at

least one light source [comprising a source which] emits light having a spectral

region in the UV-Vis spectral region[, preferably in the range between 320 and 750 nm].

3. (Amended) The apparatus as claimed in claim 1, [having a] wherein said at

least one light source [which] is a xenon pulsed light source.

4. (Amended) The apparatus as claimed in claim 1, [having a] wherein said at

least one light source [which] emits light having a spectral region in the red or near

infrared [(NIR)] spectral region[, preferably between 600 and 900 nm].

5. (Amended) The apparatus as claimed in claim 1, [having a light]
wherein said
at least one light source [which] is a laser diode or a light-emitting diode
[(LED)].

6. (Amended) The apparatus as claimed in claim 5, [where the IR-LED]
wherein
said light-emitting diode emits [in the range between] light having a spectral
region ranging from 800 [and] to 950 nm.

7. (Twice Amended) The apparatus as claimed in claim 1 [where the]
wherein said at least one light source is used in pulsed operation.

8. (Amended) The apparatus as claimed in claim 1, [provided with a beam]
wherein said at least one light guidance arrangement [which] is constructed
from discrete individual components on a fixed connection axis.

9. (Amended) The apparatus as claimed in claim 1, [provided with a beam]
wherein said at least one light guidance arrangement [which] comprises at
least one
flexible optical [fibers] fiber.

10. (Amended) The apparatus as claimed in claim 1, [provided with] further
comprising an insert for accommodating [filters] at least one filter which [are]
is used

for calibration of [the] said at least one light [sources used with regard to said sources'

wavelengths or absorption] source, wherein said at least one filter intersects said

common beam axis.

11. (Amended) The apparatus as claimed in claim 1, [provided with diaphragms] further comprising a second diaphragm for limiting the available beam range, wherein said a second diaphragm intersects said common beam axis.

12. (Amended) The apparatus as claimed in claim 1, further comprising a [partly transparent mirror] beam splitter for [detecting] guiding a [defined] proportion of the [useful] light as said at least one reference signal, wherein said at least one beam splitter intersects said common beam axis.

13. (Amended) The apparatus as claimed in claim 1, [provided with a] further comprising a second diaphragm for masking out the light impinging at small angles around [the axis of incidence] said common beam axis, wherein said a second diaphragm intersects said at least one common beam axis.

14. (Twice Amended) The apparatus as claimed in claim 13, [in which the] wherein said at least one second diaphragm is [used on the one hand for]

capable of masking out the scattered-light impinging at small angles around the forward direction[,]

of said common beam axis and also [for] capable of transmitting the light impinging at small angles around 0° [,] from the material to be measured and relative to said

common beam axis for further measurement.

15. (Twice Amended) The apparatus as claimed in claim 14, [in which]
wherein the light is detected at angles of [<] less than 5° around the forward direction of said common beam axis.

16. (Twice Amended) The apparatus as claimed in claim 15, [such that]
wherein the impinging light is guided out from [the beam path] said common beam axis with [the aid of] a beam deflection arrangement.

17. (Amended) The apparatus as claimed in claim 16, [such that the]
wherein said beam deflection arrangement comprises rigid optical components or an optical [waveguides] waveguide with corresponding connection components.

18. (Twice Amended) The apparatus as claimed in claim 17, [such that]
wherein the detected light of said at least one signal is directed to [the] an entrance slit of a spectrophotometer unit.

19. (Twice Amended) The apparatus as claimed in claim 14, [in which] wherein the scattered light of said at least one signal passing through [the] said at least one diaphragm is imaged onto [the] an input of a detector by a lens system.

20. (Twice Amended) The apparatus as claimed in claim 19, [provided with filters] further comprising a second filter for separating out and surpressing light of an undesirable [wavelength ranges] spectral region.

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21. (Amended) The apparatus as claimed in claim 1, [provided with] further comprising an optoelectronic [components] component for the pulsed driving of [the] said at least one light [sources used] source, wherein said optoelectronic component is operably configured with said at least one light source.

22. (Amended) The apparatus as claimed in claim 1, [provided with] further comprising at least one electronic [components] component for amplification and conversion of the signals for further measurement processing, wherein said at least one electronic component is operably configured with said at least one sensor.

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23. (Amended) The apparatus as claimed in claim 1, comprising a processor unit for common control of the components, evaluation and presentation of [the signals] said at least one signal.

24. (Amended) The apparatus as claimed in claim 1, comprising a dichroic filter which combines the [wavelengths] **spectral regions** available from [the] said at least

one light [sources of] source having a different spectral bandwidth for the excitation of the material to be measured in [a cuvette] said reaction location onto a common beam guidance arrangement.

25. (Twice Amended) [The use of] A process for in-vitro diagnosis, comprising detecting at least one signal from an apparatus as claimed in [at least one] of claim 1 in a spectrophotometric and/or nephelometric analyzer in in-vitro diagnosis.

Please add the following new claims 26 to 40 as follows:

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--26. The apparatus as claimed in claim 1, comprising at least two light sources having a spectral region.

27. The apparatus as claimed in claim 26, wherein said at least two light sources have different spectral regions.

28. The apparatus as claimed in claim 1, comprising at least two light guidance arrangements.

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29. The apparatus as claimed in claim 1, comprising at least two filters for separation or combination of at least one desired spectral region and for beam shaping.
30. The apparatus as claimed in claim 1, comprising at least two diaphragms for limiting the beam diameters and beam shaping.
31. The apparatus as claimed in claim 2, wherein said spectral region ranges from 300 to 800 nm.
32. The apparatus as claimed in claim 4, wherein the spectral region ranges from 600 to 950 nm.
33. The apparatus as claimed in claim 1, wherein said at least one diaphragm is capable of masking out the scattered-light impinging at small angles around the forward direction of said common beam axis and also capable of transmitting the light impinging at small angles around 0° from the material to be measured and relative to said common beam axis for further measurement.
34. The apparatus as claimed in claim 1, wherein said at least one signal is detected at angles of less than 5° around the forward direction of said common beam axis.
35. The apparatus as claimed in claim 1, further comprising directing said at least one signal to an entrance slit of a spectrophotometer unit.
36. The apparatus as claimed in claim 1, further comprising imaging said at least one signal onto an input of a detector by a lens system.

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37. The apparatus as claimed in claim 1, wherein said at least one filter is for separating out and suppressing light of an undesirable spectral region.
38. A process for in-vitro diagnosis, comprising detecting at least one signal from an apparatus as claimed in claim 2 in a spectrophotometric and/or nephelometric analyzer in in-vitro diagnosis.
39. An apparatus according to claim 1, wherein said at least one sensor is capable of essentially simultaneously detecting said at least one signal generated by said material to be measured and at least one reference signal, wherein said at least one signal generated by said material to be measured is chosen from signals of scattered-light measurements and photometric measurements.
40. A process for in-vitro diagnosis, comprising detecting at least one signal from an apparatus as claimed in claim 39 in a spectrophotometric and/or nephelometric analyzer in in-vitro diagnosis.--.

REMARKS

Claims 1 to 40 are pending. The specification has been amended for clarification and consistency with the claims and drawings as originally filed.

Claims 1 to 25 have been amended to conform with U.S. practice. Each claim is supported in the specification as filed. Prompt and favorable consideration of this application is requested.